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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,479	11/01/2000	Alfred Busch	CM1758M/VB	1247

27752 7590 08/02/2002

THE PROCTER & GAMBLE COMPANY  
INTELLECTUAL PROPERTY DIVISION  
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CINCINNATI, OH 45224

EXAMINER

KUMAR, PREETI

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 08/02/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/674,479		BUSCH ET AL	
	<b>Examiner</b>		<b>Art Unit</b>	
	Preeti Kumar		1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 May 2002.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 18-20 and 22-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 18-20 and 22-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Claims 1-3, 18-20 and 22-35 are pending.
2. Objection of claim 3 is withdrawn in light of applicant's amendment.
3. 35 U.S.C 112 rejection of claim 21 is withdrawn in light of applicant's amendment.
4. The rejection of claims 1-3 and 18-20 and 22-35 rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler et al. (US 6,268,196) in view of Schulein et al. (US 6,117,664) is maintained for the reasons of record.

Specifically regarding claim 1, as described in the previous office action, Fowler et al. teach that many cellulase enzymes including cellulases from *T. longibrachiatum* and *Humicola insolens* are known to incorporate a catalytic core domain subunit which is attached via a linker region to a cellulose binding domain subunit. Please see col.11, ln.50-55. Furthermore, Fowler et al. specifically teach that the cellulose binding domains of *T. Longibrachiatum* cellulases are linked by a peptide rich in Ser, Thr, Pro, thereby the broad teachings of Fowler et al. can be interpreted by one of ordinary skill in the art to include a cellulolytic enzyme EGI linked to an amino acid sequence comprising a cellulose binding domain, via employment of a linking region.

### ***Response to Arguments***

5. Applicant's arguments filed in paper #8 on May 28, 2002, have been fully considered but they are not persuasive. Applicants urge that the prior art does not teach or suggest a modified enzyme comprising a catalytically active amino acid

Art Unit: 1751

sequence of a cellulolytic enzyme EGI linked to an amino acid sequence comprising a CBD, via employment of a specific linking region. However, contrary to Applicants arguments, Fowler et al. do specifically teach an amino acid linking region for use in a method of treating cellulose containing fabrics with a detergent composition comprising cellulase enzyme. One skilled in the art, at the time the invention was made, would have been motivated to utilize a linking region such as the CiP linker of *E. coli* (from the OmpA gene) since it is a proline-rich linker and Fowler et al. teach the use of cellulolytic EGI enzymes in which the cellulose binding domains are linked by a peptide rich in Ser, Thr, Pro. Furthermore, Fowler et al. in view of Schulein et al. suggest a detergent composition comprising a cellulolytic EGI enzyme derived from *Humicola insolens* or *Trichoderma reesei* containing 415 amino acids linked via a proline-rich linker to an amino acid sequence comprising a cellulose binding domain.

### **Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 1751

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 703-305-0178. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 703-308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

PK  
July 25, 2002

GREGORY DELCOTTO  
PRIMARY EXAMINER



Preeti Kumar  
Examiner  
Art Unit 1751